

IN THE CLAIMS:

1. An application and transfer device comprising:

[(a)] a frame [having opposite sides];

[(b)] a first nip roller rotatably mounted to [and extending between said sides of] said frame;

[(c)] said frame having a first feed roll mounting structure [means for mounting a feed roll to said frame];

said frame having a second feed roll mounting structure:

[(d)] a second nip roller [rotatively] rotatably mounted [and extending between said sides of] to said frame adjacent said first nip roller;

[(e)] second mounting means for mounting a feed roll to said frame;

[(f)] actuating means an actuator constructed and arranged to affect nip roller [for imparting] rotation [to at least one of said nip rollers];

[(g)] first and second removable feed rolls [of material] each having a generally cylindrical core about which feed material is wound [and] said feed rolls being removably mounted to said feed roll mounting structures [supported] for [rotation in said respective first and second mounting means] rotational unwinding of said feed material; and

[(h)] said feed rolls comprising pre-tensioning [means] structure associated with each of said cores [for], said-pre-tensioning structure being constructed and arranged such that, when said feed rolls are removably mounted to said frame, said pre-tensioning structure cooperates with said frame so as to [selectively establishing] establish a predetermined resistance to rotation of the feed rolls [of material] to provide [the] proper application tension [for unwinding] to the feed material during the unwinding thereof [wherein said pre-tensioning means includes a tensioning cap

affixed to said cores, said caps having an end plate engaging the end of the associated core and said plate with securement means engageable in said mounting means and further including biasing means for applying a predetermined force biasing said end plate into engagement with the end of said roll core],

wherein the removable mounting of said feed rolls allows an operator to remove said feed rolls from said frame and thereafter removably mount replacement feed rolls to said frame.

2. The applicator and transfer device of claim 1 including [means] nip roller moving structure constructed and arranged to move [for moving] said nip rollers from a first position out of engagement into a second position into engagement with one another.

3. The applicator and transfer device of claim 1 wherein said [first and second mounting means] frame comprises [slot means] slots located [in the] on opposite sides of [the] said frame, said feed rolls being removably mounted in said slots.

4. The applicator and transfer device of claim 1 further including a feed tray [means polished] disposed adjacent said nip rollers for guiding a master into said nip rollers.

5. The applicator and transfer device of claim 4 further including a cut-off [means] mechanism located adjacent the nip rollers opposite the feed tray, said

cut-off mechanism being constructed and arranged to cut substrates discharged from the nip rollers.

6. The applicator and transfer device of claim 1 wherein [the axis of] said nip rollers [are] have parallel [to one another] axes and wherein the axis of one of said nip rollers is horizontally displaced relative to the other nip roller.

7. The applicator and transfer device of claim [1] 3 further including biasing [means for maintaining] biasing structure constructed and arranged to removably maintain said feed rolls in their respective [mounting means] slots.

8. The applicator and transfer device of claim 2 wherein said [means] nip roller moving structure is [for moving said nip rollers comprises] a gibb plate.

9. The applicator and transfer device of claim 1 wherein said feed rolls are located immediately adjacent the associated nip roller.

10. An applicator and adhesive transfer device comprising:

[(a)] an upper frame member [having opposite sides] and a lower frame member [having opposite sides], said upper frame member being pivotally connected to said lower frame member;

[(b)] a first nip roller [rotatively] rotatably mounted to [and extending between the sides] of [said upper frame member;]

[(c)] a first feed roll mounting structure [means] associated with the upper frame member;

a second feed roll mounting structure associated with the lower frame

member;

[(d)] a second nip roller [rotatively] rotatably mounted to [and extending between the sides of] said lower frame member;

[(e)] second mounting means associated with the said lower frame member;

[(f)] first and second removable feed rolls [of feed material] each having a generally cylindrical core about which [the] feed material is wound [and] said feed rolls being removably mounted to said feed roll mounting structures [supported] for [rotation in said respective first and second mounting means] rotational unwinding of said feed material;

[(g)] said feed rolls comprising pre-tensioning [means integrally] structure associated with each of said cores [for] said pre-tensioning structure being constructed and arranged such that, when said feed rolls are removably mounted to said frame, said pre-tensioning structure cooperates with said upper and lower frame members so as to establish [selectively establishing] a predetermined resistance to rotation of the feed rolls [of feed material] to provide [the] proper application tension [for] to the feed material during the unwinding thereof[, said pre-tensioning means including a tensioning cap affixed to said associated core having an end plate engaging the associated core and said plate having with securement means engageable in said mounting means and further including biasing means for applying a predetermined force biasing said end plate into engagement with the associated core]; and

[(h)] actuating means an actuator constructed and arranged to affect [for imparting] nip roller rotation [to at least one of said nip rollers];

[14. The applicator and adhesive transfer device of claim 13 wherein said engagement means includes pre-tensioning means for controlling the pay-out of feed material from said rolls.]

[15. The applicator and adhesive transfer device of claim 10 wherein said core has an end plate engaging the opposite ends of said core with projection means engageable in said impounding means and further including means for applying a predetermined force biasing said end plate into engagement with the ends of said roll core.]

wherein the removable mounting of said feed rolls allows an operator to remove said feed rolls from said frame and thereafter removably mount replacement feed rolls to said frame.

11. The applicator and adhesive transfer device of claim 10 wherein said upper frame member is [pivotal between a non-actuated position and an actuated position in which the nip rollers are in engagement] pivotably connected to said lower frame member.

12. The applicator and adhesive transfer device of claim [11] 10 further including [gear means] intermeshing gears associated with each of said first and second nip rollers [wherein] such that actuation of one nip roller will impart rotation to the other of said nip rollers.

13. The applicator and adhesive transfer device of claim 10 wherein said [mounting means] frame comprises [slot means] slots in said upper and lower frame members, said feed rolls being removably mounted in said slots [and further including first and second feed rolls each having engagement means engageable in said mounting means].

Cancel claims 14 and 15.

16. The applicator and adhesive transfer device of claim 10 further including a feed tray [generally aligned with the inner face of the] disposed adjacent said nip rollers when said [nip rollers are in said second engaged position] upper

frame member is in said closed position and being configured to guide a master into said nip rollers.

17. The applicator and adhesive transfer device of claim 10 further including a cut-off [means] mechanism constructed and arranged to cut substrates discharged from the nip rollers.

18. The applicator and adhesive transfer device of claim 10 wherein said nip rollers have parallel axes and the axis of said [second] one nip roller is horizontally displaced from the axis of [said second] the other nip roller.

19. (New) The applicator and transfer device of claim 1, wherein said pre-tensioning structure of each feed roll includes a tensioning cap affixed to an associated core, said cap having an end plate engaging an end of the associated core and biasing structure for applying a predetermined biasing force biasing said end plate into engagement with the end of said core, said plate having securement structure engageable with said frame.

20. (New) The applicator and transfer device of claim 10, wherein said pre-tensioning structure of each feed roll includes a tensioning cap affixed to an associated core, said cap having an end plate engaging an end of the associated core and biasing structure for applying a predetermined biasing force biasing said end plate into engagement with the end of said core, said plate having securement structure engageable with said frame.

✓ 21. (New) A laminating and adhesive transfer apparatus to be used in conjunction with a pair of feed roll assemblies, each of said feed roll assemblies having a core carrying a supply of stock material to be unwound and comprising pre-tensioning structure engaged with said core, said apparatus comprising:

a frame providing feed roll mounting structures, said mounting structures being constructed and arranged to removably mount the feed roll assemblies to said frame;

a pair of nip rollers rotatably mounted to said frame;

said feed roll mounting structures being constructed and arranged such that the stock material can be unrolled from each of the feed roll assemblies and fed between said nip rollers along with a master when the feed roll assemblies are removably mounted to said frame;

an actuator constructed and arranged to affect nip roller rotation such that said nip rollers cooperate to perform a laminating or adhesive transfer process on the master and the stock materials fed therebetween and thereafter discharge the processed master and stock materials outwardly therefrom;

each of said feed roll mounting structures being constructed and arranged to engage the feed roll assembly removably mounted thereto such that the pre-tensioning structure of the feed roll assembly cooperates with said frame to apply frictional resistance to the core, thereby tensioning the stock material being unwound from the feed roll assembly;

said feed roll mounting structures being constructed and arranged such that the feed roll assemblies can be removed from said apparatus to thereby allow replacement feed roll assemblies to be removably mounted to said frame.

22. (New) A laminating and adhesive transfer apparatus according to claim 21, wherein said feed roll mounting structure comprise slots positioned and configured to removably receive the feed roll assemblies.

23. (New) A laminating and adhesive transfer device according to claim 22, wherein said slots are configured to engage tabs extending outwardly from the pre-tensioning structures of the feed roll assemblies.

24. (New) A laminating and adhesive transfer apparatus according to claim 23, wherein said nip rollers are mounted for movement towards and away from one another, said apparatus further comprising

a nip engagement lever associated with nip rollers, said lever being constructed and arranged such that movement of said lever moves said nip rollers (1) towards one another into a closed position wherein the nip rollers can perform said laminating or adhesive transfer process and (2) away from one another to a separated position to provide access between said nip roller for facilitating loading of the stock material.

25. (New) A laminating and adhesive transfer apparatus according to claim 24, further comprising:

a feed tray providing a planar feeding surface configured to support the master before feeding it between said nip rollers.

26. (New) A laminating and adhesive transfer apparatus according to claim 25, further comprising:

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a cutting bar positioned and configured to allow a user to sever the processed master and stock materials being discharged outwardly from said nip rollers.

27. (New) A laminating and adhesive transfer apparatus according to claim 26, wherein said slots comprise upper slots extending vertically and lower slots extending horizontally.

28. (New) A feed roll assembly to be used in conjunction with a laminating and adhesive transfer apparatus, the apparatus comprising a pair of nip rollers, a frame, feed roll mounting structure, and an actuator constructed and arranged to affect nip roller rotation, said assembly comprising:

a core carrying a supply of stock material to be unwound; and

pre-tensioning structure engaged with said core;

said pre-tensioning structure being constructed and arranged to removably mount said feed roll assembly to the feed roll mounting structure of the apparatus such that said feed roll assembly can be removed from the apparatus to thereby allow replacement feed roll assemblies to be removably mounted to the frame;

said core being constructed and arranged such that, when said feed roll assembly is removably mounted to the frame, the stock material can be unwound, disposed on one opposing side of a master; and thereafter be fed between the nip rollers along with stock material disposed on the other opposing side of the nip roller, thereby enabling a user to operate the apparatus actuator and affect the nip roller rotation such that the nip rollers cooperate to perform a laminating or adhesive transfer process to the master and stock materials and subsequently discharge the processed master and stock materials outwardly therefrom;

said pre-tensioning structure being constructed and arranged such that, when said feed roll assembly is removably mounted to the feed roll mounting structure of the frame, said pre-tensioning structure cooperates with the frame to apply frictional resistance to the core, thereby tensioning the stock material being unwound from the core.

29. (New) A feed roll assembly according to claim 28, wherein said pre-tensioning structure comprises end plates having interior surfaces, engaged with opposing ends of said core,

said end plates being positioned and configured to be engaged with the frame when said assembly is removably mounted to the frame such that said interior surfaces of said end plates apply said frictional resistance.

30. (New) A feed roll assembly according to claim 29, wherein said pre-tensioning structure further comprises end caps received within said opposing ends of said core,

said end plates being secured to said end caps.

31. (New) A feed roll assembly according to claim 30, wherein said pre-tensioning structure further comprises:

a pair of threaded shafts securing said end plates to said end caps; and

a pair of nuts threadingly engaged with said threaded shafts and engaged with exterior surfaces of said end caps,

said pre-tensioning structure being constructed and arranged such that the amount of frictional resistance applied to said core can be adjusted by adjusting positions of said nuts.

32. (New) A feed roll assembly according to claim 31, wherein said end plates comprise mounting tabs positioned and configured to be removably received within slots on the apparatus frame when said feed roll assembly is removably mounted to the frame.

33. (New) A feed roll assembly according to claim 32, wherein said stock material is laminating material.

34. (New) A feed roll assembly according to claim 32, wherein said stock material is adhesive transfer material.

35. (New) A feed roll assembly according to claim 32, wherein said end plate is circular.